

# HEATING, VENTILATION & AIR CONDITIONING

NYS CIP CODE: 47.0201

## Program Summary

- Gain an understanding of the fundamentals of residential and light commercial plumbing, heating, and air conditioning installation, service and repair.
- You'll interpret blueprints, drawings, and schematics and be able to assemble, prepare and install piping and HVAC equipment for a variety of residential and light commercial applications.
- Be part of the team that constructs a modular home in conjunction with the Building Trades and Electrical classes.
- Get training on the latest green and solar technologies.
- Careers in the heating and air conditioning installation industry are growing rapidly each year.

## College Credit Connections

- Alfred State College
- SUNY Canton
- University of Northwestern Ohio

## Additional Information

- Students are responsible for purchasing leather gloves, work shoes, a tool belt, and basic hand tools.

## Career Pathways

### Professional Careers

Building Inspector  
Building Superintendent  
Contractor  
Mechanical Engineer  
Operations Manager  
Plumbing / HVAC Educator

### Technical Careers

Estimator  
HVAC Technician  
Industrial Plumbing Technician  
Master Plumber  
Pipe Fitter  
Union Steamfitter

### Entry Level Careers

Appliance Repair Technician  
Building Maintenance Technician  
Counter Sales Technician  
Handyman  
HVAC Installer  
Plumbing Apprentice  
Service Technician



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## Drainage, Waste and Vents

- Learn to properly size, layout, and install DWV for both residential and commercial applications.

## Potable Water Systems

- Learn to properly size, layout, and install potable water systems.

## Forced Air Heating Systems

- Learn to properly size, install, troubleshoot, and repair all types of residential forced air furnaces.

## Steam and Hydronic Heating Systems

- Learn to properly size, install, troubleshoot, and repair all types of residential boiler systems.

## Central Air Conditioning Systems

- Learn to properly size, install, troubleshoot, and repair all types of residential central air systems.

## Soldering and Brazing

- A “must have” skill for all plumbers and HVAC techs! Students will learn a variety of methods for joining pipes and fittings.

## Fixture and Faucet Service and Installation

- Students will gain “real world” experience working on and installing a variety of plumbing fixtures.

## Blue Print Reading and Plumbing Drawings

- Students will learn how to quickly and accurately read and interpret blueprints and isometric drawings.

## Trade Related Certifications

- EPA608 (required to work with refrigerants)
- OSHA10

